Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A loop-type voltage regulating device, particularly for regulating a voltage of an automotive electric system that has at least one thermal engine, a voltage regulator, and an alternator operative to deliver a system-regulated voltage signal to and receive a regulation signal from the voltage regulator, comprising: a control unit connected between said thermal engine and said voltage regulator, the control unit adapted to receive ~~a regulated~~ the system-regulated voltage signal from the alternator without receiving a phase signal from the alternator and at least one engine operation signal pertaining to one from among engine torque value, engine rpm, and engine temperature, and in response thereto to supply said voltage regulator with a signal corresponding to the engine operation for controlling the regulated voltage signal delivered from the alternator.

2. (Original) The voltage regulating device of Claim 1, wherein said control unit supplies said voltage regulator with a suitable square-wave phase signal for processing by the voltage regulator.

3. (Currently Amended) The voltage regulating device of Claim 1, wherein said voltage regulator has at least a first terminal connected to a first terminal of the control unit, the control unit arranged to deliver said phase signal to said voltage regulator.

4. (Currently Amended) The voltage regulating device of Claim 3, wherein said control unit has at least a second terminal connected to said alternator to receive the ~~system regulated~~ system-regulated voltage signal.

5. (Original) The voltage regulating device of Claim 1, wherein said control unit is connected to a plurality of sensors providing it with a set of variables related to the engine operation.

6. (Canceled)

7. (Original) The voltage regulating device of Claim 2, wherein said control unit delivers, on its first terminal, a phase signal in the form of a square-wave signal having similar characteristics as a phase signal from the alternator and being processable by a conventional voltage regulator.

8. (Original) The voltage regulating device of Claim 2, wherein said voltage regulator comprises a plurality of buffers and switches effective to regulate the system voltage signal by application of different time constants according to the operational state of the engine and the frequency of the phase signal from the control unit.

9. (Canceled)

10. (Canceled)

11. (Previously Presented) A method of loop regulating a voltage, in particular a voltage of an automotive electric system, comprising:

detecting variables related to the operation of a thermal engine by having a control unit connected to the engine, the variables comprising at least one from among engine torque, engine temperature, and engine rpm;

generating a phase signal in response to the variables detected by the control unit; and

regulating a system voltage generated by an alternator using the phase signal that is processed by a voltage regulator connected in turn to the alternator of the thermal engine and without using a phase signal from the alternator.

12. (Original) The method of claim 11, wherein regulating the system voltage comprises generating a phase signal from the control unit that is adapted to be processed by the voltage regulator.

13. (Original) The method of claim 12, wherein detecting variables comprises receiving engine performance signals directly from at least one sensor associated with the thermal engine.

14.-19. (Canceled)